

Hunters Point Naval Shipyard Site (HPNS): Building Radiological Remediation Goals, 1/12/21

1. The Dispute

- The Navy says that the current radiological remediation goals (RGs) for HPNS buildings are protective, relying on risk estimates from the RESRAD BUILD calculator.
- The Navy's RESRAD BUILD analysis is based on inputs and assumptions that lower risk estimates. We believe the inputs and assumptions are not well supported.
- EPA's BPRG calculator cancer risk estimates are ~1,000 times higher than RESRAD BUILD estimates if default BPRG inputs are used (i.e., "default"). Most of the difference is in the removable fraction (dust). The Navy dismisses the default RGs generated by the BPRG calculator ("BPRGs") for dust as below background, technically not implementable (i.e., unmeasurable in the field), and not providing a "valid representation of risk." We have considered but, to date, been unable to support site-specific assumptions which would modify the default BPRG inputs and risk estimates.

Estimated Cancer Risks Associated with Selected HPNS RGs		
	RESRAD BUILD	BPRG
Ra-226	3.0 x 10 ⁻⁶	8.2 x 10 ⁻³
Cs-137	2.4 x 10 ⁻⁵	3.4 x 10 ⁻³
Th-232	3.4 x 10 ⁻⁶	1.5 x 10 ⁻³

2. Recent EPA-Navy Correspondence

8/20/20 EPA letter: Indicates lack of support for RESRAD BUILD risk estimates and inability to concur with Navy's protectiveness determination

12/11/20 Navy letter: Asks EPA to reconsider its lack of support for RESRAD BUILD

12/22/20 EPA letter: Asks Navy to further respond to EPA concerns about RESRAD BUILD, and to support claims about background levels of radiation in buildings and technical implementability of default BPRGs.

1/11/21 Navy letter: Expresses Navy belief that it has addressed EPA concerns about RESRAD BUILD and dismisses default BPRGs as unusable and impractical. Provides example background levels to support claim that BPRGs are below background. Appears to qualify the Navy's claim that BPRGs are unmeasurable, indicating they are unmeasurable in the field (i.e., lower values may be measurable in an offsite lab).

3. EPA Request to HQ

- Asked for information on two topics: i) other Superfund cleanups where remediation goals have been set for radiologically contaminated buildings intended for residential use; and ii) circumstances in which the BPRG calculator has been used. Also asked that HQ be prepared to discuss the level of conservatism designed into the BPRG calculator, particularly in characterizing exposure.
- Stuart sent out a request to EPA site managers asking for information on BPRG calculator use. Responses due next week.